AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1-44 (Cancelled)

45. (Currently Amended) A ~~An immunological~~ vaccine delivery composition comprising:

a calcium phosphate and an immunogen which elicits a host immune response that protects a host against a pathogen;

wherein said calcium phosphate comprises greater than or equal to 40 wt% of said composition, and wherein said composition is formulated as a hardenable, injectable paste ~~having a solids content of greater than or equal to 40 wt%~~.

46. (Previously Presented) The composition of claim 45, wherein said immunogen is selected from the group consisting of

a bacteria, or fragment thereof, a virus, or fragment thereof, a nucleic acid molecule, a protein, a hapten, a tolergen, and an allergen.

47-48 (Cancelled)

49. (Previously Presented) The composition of claim 45 further comprising an adjuvant.

50. (Previously Presented) The composition of claim 49, wherein said adjuvant is selected from the group consisting of muramyl dipeptide, aluminum hydroxide, aluminum phosphate, hydroxyapaptite, Incomplete Freund's adjuvant, and Complete Freund's adjuvant.

51. (Previously Presented) The composition of claim 49, wherein said adjuvant is selected so as to elicit an immune response from targeted cells or cell types.

52. (Previously Presented) The composition of claim 49, wherein said adjuvant is selected so as to elicit an immune response from cells of the same type.

53. (Previously Presented) The composition of claim 49, wherein said adjuvant is selected so as to elicit an immune response from cells of different types.

54-55 (Cancelled)

56. (Previously Presented) The composition of claim 45 further comprising a cytokine.

57. (Previously Presented) The composition of claim 56, wherein said cytokine is selected from the group consisting of IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-11, IL-13, G-CSF, IL-15, GM-CSF, OSM, LIF, IFN-γ, IFN-α, IFN-β, B7.1, B7.2, TNF-α, TNF-β, LT-β, CD40 ligand, Fas ligand, CD27 ligand, CD30 ligand, 4-1BBL, IL-8, MCP-1, MIP-α, MIP-β, RANTES, TGF-β, IL-1α, IL-1β, IL-1 RA, IL-10, IL-12, and MIF.

58. (Currently Amended) The composition of claim 45, wherein said calcium phosphate comprises at least one selected from the group consisting of amorphous calcium phosphate, nanocrystalline calcium phosphate, poorly crystalline calcium phosphate, dicalcium phosphate dihydrate, tricalcium phosphate, tetracalcium phosphate, monetite, monocalcium phosphate monohydrate, octacalcium phosphate, and ~~or~~ hydroxyapatite.

59. (Currently Amended) A method for stimulating an immune response in a mammal, said method comprising:

administering to the mammal a composition comprising a calcium phosphate and an immunogen which elicits a host immune response that protects a host against a pathogen,

wherein said calcium phosphate comprises greater than or equal to 40 wt% of said composition, and wherein said composition is formulated as a hardenable, injectable paste ~~having a solids content of greater than or equal to 40 wt%~~.

60. (Currently Amended) A method for increasing immunogenicity of an antigen in a mammal, said method comprising:

co-administering both an immunogen which elicits a host response that protects said mammal against a pathogen and a composition comprising a calcium phosphate, wherein said calcium phosphate comprises greater than or equal to 40 wt% of said composition and wherein said composition is formulated as ~~an~~ a hardenable, injectable paste ~~having a solids content of greater than or equal to 40 wt%~~.

61 (Previously Presented) The method of claim 59 or 60, wherein said immunogen is selected from the group consisting of a bacteria, or fragment thereof, a virus, or fragment thereof, a nucleic acid molecule, a protein, a hapten, a tolergen, and an allergen.

62-63 (Cancelled)

64. (Previously Presented) The method of claim 59 or 60, wherein said composition further comprises an adjuvant.

65. (Previously Presented) The method of claim 64, wherein said adjuvant is selected from the group consisting of muramyl dipeptide, aluminum hydroxide, aluminum phosphate, hydroxyapaptite, Incomplete Freund's adjuvant, and Complete Freund's adjuvant.

66. (Previously Presented) The method of claim 64, wherein said adjuvant is selected so as to elicit an immune response from targeted cells or cell types.

67. (Previously Presented) The method of claim 64, wherein said adjuvant is selected so as to elicit an immune response from cells of the same type.

68. (Previously Presented) The method of claim 64, wherein said adjuvant is selected so as to elicit an immune response from cells of different types.

69. (Cancelled)

70. (Previously Presented) The method of claim 59 or 61, wherein said composition further comprises a cytokine.

71. (Previously Presented) The method of claim 70, wherein said cytokine is selected from the group consisting of IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-11, IL-13, G-CSF, IL-15, GM-CSF, OSM, LIF, IFN-γ, IFN-α, IFN-β, B7.1, B7.2, TNF-α, TNF-β, LT-β, CD40 ligand, Fas ligand, CD27 ligand, CD30 ligand, 4-1BBL, IL-8, MCP-1, MIP-α, MIP-β, RANTES, TGF-β, IL-1α, IL-1β, IL-1 RA, IL-10, IL-12, and MIF.

72. (Currently Amended) The method of claim 59 or 60, wherein said calcium phosphate comprises at least one selected from the group consisting of amorphous calcium phosphate, nanocrystalline calcium phosphate, poorly crystalline calcium phosphate, dicalcium phosphate dihydrate, tricalcium phosphate, tetracalcium phosphate, monetite, monocalcium phosphate monohydrate, octacalcium phosphate, and ~~or~~ hydroxyapatite.